

ABSTRACT OF THE DISCLOSURE

A method and system for performing automated biological identification. The system including a preprocessing module with a histogram transform for locally and globally enhancing biological data such as fingerprints. An enhancement module with a fast smoothing and enhancement function. A feature extraction module with a fingerprint oriented thinning function. A matching module with a resolution-enhanced Hough transform function for fingerprint registration and matching score function.

2025 RELEASE UNDER E.O. 14176